ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: December 28 & 29, 1981

TO: DWPC/FOS and Records Unit

FROM: Region 1 -- Helen C. Lai

SUBJECT: CENTRAL QUALITY INDUSTRIES, INC - Polo

Person Interviewed: Mr. Robert Hewes, VP, General Manager

Weather: Sunny, temp 10-25°F

1. On 12-22-81, Yogesh Sheth of Permit Section contacted me concerning the supplemental permit application that was submitted to Permit Section by Central Quality Industries, Inc. on 12-7-81. The company is seeking a supplemental permit to drain the spray washer tank #1, #2 and #3 content into the Polo city sewer semi-annually. Yogesh had contacted Mr. Hewes and his consulting engineer, Bernhard Klingenberg, and asked for information on sample analyses. Yogesh would like to have the Agency split sample with the company if possible.

Upon receiving the call, Mr. Hewes was contacted. He said he had collected samples for two days. However, it was found that proper sampling bottles and procedures were not applied. Mr. Hewes was then advised to contact his contract lab inquiring about proper sampling bottles and procedures. Also he was told that the Agency would not accept the results unless the samples were properly collected, preserved and shipped to the lab within the allowable holding time. A field visit was arranged for further discussion.

2. On 12-28-81, I met with Mr. Hewes. He explained to me that the washer was only used to remove oil and grease from the metal parts before painting. The washer had three stages. The first stage - iron phosphate was added and heated to approximately 160°F. The second stage - neither chemical nor heat was added, the third stage - no chemical was added but heated to approximately 160°F. According to Mr. Hewes, if a permit can be obtained, he planned to drain those three tanks simultaneously in June and December. He also considered draining more often so the content would be less contaminated.

The volume of tank #1, #2 and #3 is 1750, 950, 950 gallons respectively. Since the three tanks were drained simultaneously, Mr. Hewes was asked to manually composite the sample from the three tanks in proportion to their volumes. The ratio of sample volume from tank #1, #2, #3 is estimated as 50%, 25%, 25% respectively. Mr. Hewes also said if the permit could be obtained, he would have the city official measure the pH on site each time before the tanks were drained. If the pH is lower than 6, neutralization will be done before draining. The settled sludge will be considered as special waste and disposed of in an approved landfill.

3. On 12-28-81, Mr. Hewes had already received the required sample bottles and cooler from Daily Analytical Lab and he had made arrangements to take sample from 1-4-82 to 1-7-82 at 5:30 AM before the operation started. Mr. Hewes said he was told by Yogesh that his operation was categorized as Coating Operation and samples for four consecutive days were required. Each set of samples will be shipped to Daily Analytical Lab soon after it is collected.

A copy of the sample preservation practices published by USEPA was given to Mr. Hewes as information.

4. On 12-28-81 visit, the washer was in operation, sample could not be obtained because the tank content was disturbed and heated. Mr. Hewes said that the washer would be shut off in the afternoon and would not restart until the following Monday. In order to have reference information, a return visit was made on 12-29-81 to collect a grab sample from tank #1, and a combined composite sample from tank #1, #2 and #3.

The content of tank #1 was tannish-brown in color and covered with oil and grease on the surface. The content of tank #2 and #3 was slightly murky and had no color. According to Mr. Hewes, the content of those tanks could not be drained without notifying him because each drain valve was secured with a lock.

5. The floor drain that used to connect to the runoff tile outside the building had been sealed with cement.

Lab analytical results of the samples collected on 12-29-81 are tabulated below.

	Tank Content #1	Tank #1, #2, #3 Composite (50%, 25%, 25% in volume)
Lab #	03414	03413
Date/Time	12-29-81/10:45A	12-29-81/10:30A
pH, Std Unit	5.5	5.8
BOD_5, mg/l	>439	>432
COD, mg/l	30800	16500
R.O.E., mg/l	30100	14300
TSS, mg/l	100	28
Ammonia(N), mg/l	232.0	133.0
Org.Nitrogen(N), mg/l	2263	1025
NO_2 & NO3 (N), mg/l	0.1	0.1
Phosphorus(P), mg/l	3790.0	1822.0
CN, mg/l	0.01	0.00
phenol, ppm	1.15	0.575
Ba, mg/l	0.1	0.1
Cd, mg/l	0.00	0.00
Cu,mg/l	0.21	0.10
Cr(tot), mg/l	0.02	0.02
Fe(tot), mg/l	4.5	2.1
Pb, mg/l	0.06	<0.03
Mn, mg/l	1.24	0.80
Hg, ppb	<0.05	<0.05
Ni, mg/l	0.3	0.1
Zn, mg/l	0.0	0.0

On 2-5-82, the preliminary lab analytical results were forwarded to Permit Section - Yogesh Sheth as information for reviewing the permit. On 2-22-82, the permit application was denied based on the lab results of four consecutive day samples submitted by the company. High concentrations of oil and grease, total S.S., iron, lead, Ammonia-N, phosphorus and mercury were revealed on the samples analyzed by Daily Analytical Lab.

HCL/svf

cc: -Region 1

3/10/82